
Effect of macroeconomic factors on stock returns in Nigeria

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ABSTRACT

Over the past three decades, the Nigerian stock market has grown to become one of Africa's largest and most important. Stock returns in Nigeria have been negatively impacted by a number of issues plaguing the market. There has always been debate over the correlation between stock market performance and broad economic indicators. Building an effective and optimal stock portfolio in the stock market has been a major challenge for both domestic and international investors. This study investigates the effect of macroeconomic factors on stock return in Nigeria. The study employed secondary data obtained from Central Bank of Nigeria (CBN) statistical bulletin within the period of 1986 and 2021. The data obtained were subjected to the Autoregressive Distributed Lag (ARDL) method of analysis. Findings revealed that exchange rate and foreign direct have a significant effect on stock return in Nigeria. The study also revealed that inflation rate has an insignificant effect on stock return in Nigeria. Based on the findings, the study recommended among others that the Central Bank of Nigeria should continue to implement sound monetary policies that help to stabilize the naira. This will help to reduce volatility in the exchange rate and increase investor confidence, which in turn increases stock returns.

Keywords: exchange rate, foreign direct investment, inflation rate, stock return

1. INTRODUCTION

The stock market plays a significant role in the financial industry, encompassing both developed and developing countries. The primary market of this market facilitates the provision of long-term capital to listed firms, wherein companies offer shares to the public through an initial public offering (IPO). This is accomplished through the

consolidation of financial resources from various investors, thereby enabling companies to enhance their business operations by providing investors with diverse investment opportunities for their excess funds. The growth of a nation is intrinsically linked to its economy, which comprises microeconomic and macroeconomic factors such as the price-to-earnings ratio, return on equity, inflation, interest rate, and money supply, respectively. The variables in question play a crucial role in the economy and have the potential to impact stock returns (Mohammed, 2019).

The Nigerian stock market has experienced significant growth over the past three decades, making it one of the largest and most important stock markets in Africa. However, the Nigerian stock market has faced various problems that have affected stock returns over the years. These issues include the Structural Adjustment Program (SAP) in 1986. The implementation of the SAP had significant implications for the Nigerian stock market. The devaluation of the currency led to an increase in the cost of imports, which negatively impacted companies that relied on imported goods. The reduction in government spending also had an adverse effect on the market, as it reduced the demand for goods and services and led to a decline in the overall economic activity. This resulted in a decline in stock prices and a drop in stock returns for investors.

Another significant problem faced by the Nigerian stock market was the series of financial crises that occurred in the late 1990s and early 2000s. The poor performance of the stock market during this period had a negative impact on the overall economic growth and development of Nigeria. (Isa, 2017)

Taophic (2020), posit that COVID-19 pandemic had a significant impact on the Nigerian stock market, as it did on the global economy. The pandemic led to a sharp decline in economic activity, which had a negative impact on the financial markets. The Nigerian stock market experienced a significant decline in stock prices, with the All-Share Index dropping by over 20% in the first quarter of 2020. The pandemic also had a significant impact on various sectors of the economy, such as the hospitality, travel, and tourism sectors, which were hit hard by the restrictions on movement and social gatherings. As a result, companies in these sectors experienced significant declines in their stock prices, leading to a decline in stock returns for investors.

While several studies have examined the factors of stock returns in Nigeria, there is still a significant gap in the literature regarding the relative importance of different factors and how they interact to influence stock returns. Additionally, most of the

existing studies (Ayuba & Cavusoglu, 2021, Pole, et al 2018) have focused on a relatively short time frame or have only examined a limited set of determinants. Furthermore, there is a lack of consensus on the impact of certain factors on stock returns in Nigeria, such as foreign exchange rates inflation rate, and interest. This gap in the literature makes it difficult for investors and policymakers to make informed decisions and design effective policies.

Therefore, there is a need for a comprehensive and rigorous study that examines the relative importance of different factors and their interactions in driving stock returns in Nigeria over a long time frame. Such a study can help to provide a better understanding of the Nigerian stock market and contribute to the development of more effective investment strategies and economic policies. The main objective of the study is to examine the effect of macroeconomic factors on stock market returns in Nigeria. However, the specific objectives of this study include to

- i. examine the effect of exchange rate on stock market returns in Nigeria;
- ii. evaluate the effect of foreign direct investment on stock market returns in Nigeria; and
- iii. assess the effect of inflation rate on stock market returns in Nigeria.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT.

Macroeconomic Factors

The notion of macroeconomic factors constitutes a foundational framework within the field of economics, aiming to comprehend and assess the overarching economic circumstances prevailing in a given nation or geographical area. These factors hold significant importance for policymakers, economists, and businesses in order to make well-informed decisions, anticipate economic trends, and develop efficacious strategies. Macroeconomic factors encompass a range of comprehensive economic indicators and variables that exert a substantial influence on the overall economic performance of a given economy. These factors contribute to the evaluation of the economic health, stability, and growth prospects of a nation Olaniyi and David (2019).

Stock Returns

Stock return is the level of profit or yield on a stock investment in a certain period (Hussein 2017), stock returns are a measure of the profit or loss that investors make from investing in stocks. They represent the percentage change in the value of a stock or a portfolio of stocks over a certain period of time. The stock returns can be positive, negative, or zero, depending on whether the value of the stock has

increased, decreased, or remained the same Mugiarniand Wulandari (2021). According to Fama and French, (2012) stock returns are the profits or losses that an investor earns from investing in stocks over a given period of time. Also Sharpe, (2014) defined Stock returns are the percentage change in the market value of a stock or portfolio of stocks over a certain period of time. To Gordon, (2019) Stock returns are the sum of capital gains and dividends earned from a stock or portfolio of stocks over a certain period of time.

Exchange Rate

Exchange rate represents the value of one currency in terms of another currency. In other words, it indicates how much of one currency is needed to purchase a unit of another currency. Exchange rates play a crucial role in international trade, investment, and financial transactions. According to Adjasi, et al, (2011), the definition of the exchange rate is the amount of one currency that can be exchanged for one unit of another currency, or the price of one currency expressed in terms of another currency. The rate at which the currency of one nation can be exchanged for the currency of another nation is referred to as the exchange rate (Dornbusch, 2014). Alternately, it can be understood as the value of one nation's currency in comparison to the values of currencies used by other nations. While Mankiw (2017) defines it as the price at which exchange occurs between two countries, we could say that it is the price at which exchange occurs. The question of what factors go into determining the exchange rate has vaulted to the forefront of debates in monetary and international economics. The authority in charge of monetary policy in Nigeria must contend with the challenges of maintaining a realistic and stable exchange rate that is also in harmony with the fundamentals of other macroeconomic variables. This is due to the fact that fluctuations in exchange rates can have serious repercussions, both positively and negatively, on prices, investments, and decisions pertaining to international trade.

Foreign Direct Investment

Foreign Direct Investment (FDI) is a significant aspect of international economics and business, involving the investment of capital and resources by a company or individual from one country (the "home country") into another country (the "host country"). FDI typically involves acquiring a significant ownership stake (usually at least 10%) in a foreign company or establishing new business operations in the host country. FDI has far-reaching implications for economies, businesses, and global trade. Foreign direct investment (FDI) is defined by the International Monetary Fund (2017) as "an investment made to acquire a lasting interest in an enterprise operating

in an economy other than that of the investor, with the investor's purpose being to have an effective voice in the management of the enterprise." Both of these meanings are accurate, as they capture the spirit of what foreign investors are trying to accomplish.

From a strategic perspective, FDI can also have a significant impact on the stock returns of companies that receive foreign investment. When a company receives FDI, it gains access to new markets and resources that can help it to expand its operations and improve its competitive position. This can lead to increased sales, profits, and higher stock returns. Chen (2017) found that FDI can have a significant positive impact on the stock returns of firms that receive foreign investment. The authors argue that FDI can help firms to gain access to new markets, resources, and expertise that can improve their competitive position. The study found that firms that receive FDI have higher stock returns than firms that do not receive FDI. However, there are also arguments against the effect of FDI on stock returns. One argument is that the impact of FDI on stock returns may be short-lived and not sustainable over the long term. This is because the benefits of FDI may be offset by the costs and risks associated with foreign investment. Girma and Yu (2002) found that the impact of FDI on stock returns is not significant in the long term. The authors argue that the benefits of FDI may be offset by the costs and risks associated with foreign investment. The study found that the impact of FDI on stock returns is significant only in the short term, and this impact dissipates over time.

Inflation Rate

The inflation rate is a key macroeconomic concept that measures the rate at which the general price level of goods and services in an economy is rising over a specific period of time. It indicates the erosion of purchasing power of money and is often expressed as a percentage. Inflation is a fundamental economic phenomenon that has far-reaching implications for consumers, businesses, policymakers, and investors. According to Ceyda (2010), inflation is a persistent increase in the general price level of goods and services in an economy over a period of time. As goods and services require more money to purchase the implicit when value of money falls. Thus, high rates of inflation erode the purchasing power of an economy's currency. Inflation is generally measured in the consumer price index (CPI) or retail price index (RPI). Inflation reduces the purchasing power of a country's currency, as we need more units of currency over time to buy the same goods and services. The percentage change in a CPI is used as a measure of inflation, and can be measured monthly, quarterly or annually. Inflation is defined as the rate of increase in prices over a given period of time.

Empirical Review

Javangweand Takawira (2022), examined the relationship between the stock market and exchange rate in South Africa for the period from 1980 to 2020. Quarterly data was used employing the Autoregressive Distributed Lag (ARDL) model given the order of integration of the variables. The empirical results revealed that there is a long-term relationship between the variables of interest. The results also revealed that there is a negative relationship between the stock market and exchange rate movement. The results also show that there is a negative relationship between the stock market and the interest rate as well as inflation as measured by CPI. These results imply that innovations in the exchange rate do have an impact on what happens to the stock market. The impact of exchange rates on stock market can be positive in the short run and negative in the long run and so policymakers can use our findings to avoid making unnecessary monetary or fiscal policy decisions.

Nwankpa and Olaolu (2021), examined the effects of macroeconomic factors on stock returns for top twenty-five (25) most capitalized quoted equity firms in Nigeria. The study investigated the effects of inflation rate on stock returns of selected quoted firms in Nigeria from 2007-2016. The population comprises top twenty-five (25) most capitalized quoted equity firms, out of which twenty-one (21) companies represented the sample of the study. The study adopted ex-post facto research design. The study used secondary data obtained from the audited accounts of the sampled firms, Central Bank of Nigeria Statistical Bulletin and the Nigerian Stock Exchange database and website. Analysis of data was carried out using panel data regression. The panel regression results indicated significant negative effects between inflation rate and stock returns of selected quoted companies in Nigeria. However, this study didn't carry out the research with the recent data on the Nigeria Stock Exchange thereby causing this research old hence the need to carry further research with recent data.

Wang, et al (2019), examines the impact of foreign direct investment on stock market development in Ghana over the period 1991-2017 using annual time series. The study employed the Autoregressive Distributed Lag (ARDL) approach to cointegration to establish the long-run and short-run relationship amongst the variables under study. The bounds test for cointegration showed that there is a long-run equilibrium relationship among the variables under study. The Error Correction estimates suggest that in the long-run, foreign direct investment inflows impact negatively on stock market development but it is statistically not significant however in the short-run, FDI inflows have significant positive impact on stock market development.

Malcus and Persson (2018), examine the role of Foreign Direct Investment on the stock market development and various macroeconomic control variables is also included in the model. Data used are the Swedish quarterly data observed between 1982 and 2017. The result suggests no strong contemporaneous relationship between Foreign Direct Investment and the stock market development while the Foreign Direct Investment during the previous quarter significantly and negatively affect the stock market implying that Foreign Direct Investment might be considered as a short-term substitute to the stock market. The results are robust with respect to several checks. This thesis discusses the implication of these results.

Ambunya, (2012), studied the relationship between exchange rate movement and stock market returns volatility at the Nairobi Securities Exchange. The study adopted a quantitative design. The target population for this study included 56 companies quoted at the NSE as of December 2011. The study used secondary data collected from the Nairobi Securities Exchange and the Central bank of Kenya for the period 2007-2011. The study regressed stock market returns volatility against exchange rate movement. From the regression output, the study established that exchange rate movements greatly affected the stock market return volatility owing to its information content to the investors. With high fluctuations in the exchange rates, the exchange rates movement became bigger accompanied by a huge stock market return volatility.

Ngobe and Emenike (2020), investigates the relationship between foreign direct investment and stock market development in a small southern African economy. Specifically, the paper analyses long-run, short-run and causal relationships between foreign direct investment and stock market development in Eswatini for the 1990 to 2018 periods. Results of preliminary analyses of the variable show existence of positive skewness, fat-tailed, non-normal distribution, and I(1) order of integration for the foreign direct investment and stock market return series. Estimates from the ARDL model indicate evidence of a positive and statistically insignificant long-run relationship between foreign direct investment and stock market development in the kingdom of Eswatini. But in the short-run, there exist no relationship between foreign direct investment and stock market development in Eswatini. Estimates from Granger causality test do not show any evidence of causal relationship between foreign direct investment and stock market development in Eswatini.

Joseph, et al (2017), investigated the effect of inflation on stock market returns on the Nigerian stock exchange market. The study employed Generalized Autoregressive Conditional Heteroscedasticity (GARCH) and Exponential Generalized Autoregressive Conditional Heteroscedasticity (E-GARCH) volatility

modeling techniques for analysis. The study found that inflation is not an important variable in explaining stock market return in Nigeria. With the model used, the study did not find existence of asymmetry in the stock return series, and that's bad news on the impact on stock returns in Nigeria. More so, the models used showed a high persistence in the stock returns series, creating a shock to stock returns and has only a temporary impact.

Amtiran, et al (2017), investigated the effect of inflation rate on stock returns of manufacturing companies listed in Indonesia Stock Exchange (ISE) between January 2007 and 2014. The study used OLS to analyze the data collected. The findings showed that inflation has negative relationship with stock returns of firms listed on Indonesia Stock Exchange. The use of OLS to analyze the data was inappropriate. This is because the Ordinary Least Square (OLS) does not seem to explain the individualistic effects of the listed manufacturing firms in Indonesia Stock Exchange.

Nijam, *et al* (2015), examined the connection between macroeconomic variables and performance of stock markets in Sri Lanka. Independent variables such as GDP, inflation, balance of payment, interest rate, and exchange rate for the period between 1980 and 2012 are tested. The study utilizes the Ordinary Least Square (OLS) to examine regression model. The study finds that GDP, exchange rate and interest rate have positive and significant impact on stock returns in Sri Lanka, while inflation has negative significant impact on stock returns. A further finding shows that balance of payment has insignificant effect on stock market performance in Sri Lanka. However, the study used OLS which does not capture both cross sectional and individual effects of firms. Also, panel data can be useful in tackling some shortcomings of time series data.

Based on the foregoing empirical review, this study hypothesized that:

- i. Exchange rate has a significant effect on stock market returns in Nigeria*
- ii. Foreign Direct Investment has a significant effect on stock market returns in Nigeria*
- iii. Inflation rate has a significant effect on stock market returns in Nigeria*

Theoretical Framework

Rational Expectation Theory (RET) is a theoretical framework in economics that suggests that people make rational and informed decisions based on all available information, including past events, current economic conditions, and future expectations. This theory has been applied to the study of stock returns, with some researchers finding evidence to support its use as a framework for understanding the relationship between rational expectations and stock returns. RET posits that people make rational decisions based on all available information, including the expected future value of stocks. This implies that stock prices should reflect all available information, including expectations about future earnings, dividends, and other relevant factors. In other words, stock prices should already incorporate all known information, making it difficult for investors to outperform the market consistently.

RET also suggests that changes in expectations can have an impact on stock returns. For example, if investors expect a company to have higher earnings in the future, they may bid up the stock price, leading to positive stock returns. Conversely, if investors expect a company to have lower earnings in the future, they may sell off the stock, leading to negative stock returns.

In conclusion, RET is a useful framework for studying the impact of monetary policy shocks on stock returns. It provides a benchmark for assessing the impact of monetary policy shocks on stock prices and suggests that changes in expectations can have a significant impact on stock returns. Empirical evidence supports the use of RET in this context, highlighting the importance of understanding how changes in monetary policy are likely to impact different sectors of the economy and how these impacts are likely to be reflected in stock prices.

3.METHODOLOGY

The study adopts ex-post factor research design. The data used in this study were obtained from secondary sources, specifically the Central Bank of Nigeria (CBN) and Nigerian Exchange Group (NGX) official websites. The data were collected from various bulletins and reports published by the CBN and the daily stock prices were extracted from the NGX official website. The data used in this study cover the period of 1986 to 2021.

Autoregressive Distributed Lagged Model (ARDL) was employed as technique of data analysis to study factors affecting stock returns in Nigeria. To conduct a

diagnostic test prior to the estimation of the model in order to examine the time series properties of the series, a standard unit root test procedures are utilized. The ADF tests. This is done to circumvent or avoid the problem of spurious results typical of non-stationary time series models.

The ARDL model can be expressed mathematically as follows:

$$SR_t = \beta_0 + \beta_1 SR_{t-1} + \beta_2 EXCH_{t-1} + \beta_3 FDI_{t-1} + \beta_4 IFR_{t-1} + \epsilon_t$$

Where:

SR_t represents stock returns at time t .

$EXCH_{t-1}$ represents the exchange rate at time $t-1$.

FDI_{t-1} represents foreign direct investment at time $t-1$.

IFR_{t-1} represents the inflation rate at time $t-1$.

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$ are the coefficients to be estimated.

ϵ_t represents the error term.

Table 1
Variables Measurements

Variables	Source
Stock Returns	Nigerian Stock exchange All Share Index (ASI) which proxy stock return, Josiah (2019)
Exchange Rate (EXCH)	Domestic exchange rate with respect to US\$ Osinubi and Amaghionyeodiwe, (2009)
Foreign Direct Investment (FDI)	Foreign direct investment, net inflows World bank databank, (2021).
Inflation rate (IFR)	Annual % change in the cost of consumer goods and services Okech (2016), Amtiran, Indiastuti, Nidar&Masyita (2017), Okoro (2017).

Source: Generated by the Author (2023)

4. RESULT AND DISCUSSIONS

Table 2
Unit Root Test

Variables	Adf-Statistics	Order of Integration
ASII	-3.282316 (0.0240)	Level
EXCH	-4.643784 (0.0007)	First difference
FDI	-8.925536(0.0000)	First difference
IFR	-3.423784(0.0170)	Level

Source: Author's Analysis (2023).

Because the null hypothesis that the series of each of these variables has a unit root cannot be rejected at any chosen level of significance (1%, 5%, and 10%), but could

only be rejected after a difference of one, the unit root test (Table 2) revealed that not all of the series that were being investigated were stationary. While the series of All share Index and inflation rate were all stationary at level, the series of exchange rate and foreign direct investment were all first difference. Based on these findings, it was clear that conducting a regression analysis on these variables using the Ordinary Least Square (OLS) Regression Technique would produce misleading findings due to the fact that several of the Traditional Least Square assumptions had been broken. To get a better idea of how these variables interact in the long run, however, it was necessary to figure out their relationship before moving on to the actual estimation.

Table 3
Auto-Regressive Distributed Lag (ARDL) Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
EXCH	0.866763	0.094739	9.148918	0.0000
EXCH (-1)	-0.674891	0.242311	-2.785228	0.0111
FDI	-0.001825	0.001467	-1.244140	0.2265
FDI (-1)	0.002548	0.001087	2.343232	0.0286
IFR	-0.122710	0.066003	-1.859164	0.0764
IFR (-1)	-0.003531	0.002514	-1.404934	0.1740
C	0.466104	0.813306	0.573098	0.5724
R-squared	0.788041			
Adjusted R ²	0.712061			
Durbin-Wat. stat	1.812337			
F-statistic	165.2336			
Prob(F-statistic)	0.000000			

Source: Author's Analysis (2023).

The R-squared value in Table 4.4 indicates that the exchange rate, foreign direct investment, inflation rate, interest rate and money supply explain 0.788041 (79%) of share return. The F-statistic and probability of chi2 values 165.2336 also suggest that the model is a good fit and provide evidence to support the use of these variables in studying the determinants of stock returns in Nigeria.

The table 3 presents the results of a study that investigated the relationship between exchange rate and stock returns in Nigeria. The study found that the exchange rate has a positive coefficient of 0.866763, which means that there is a positive relationship between exchange rate and stock return in the short run. Specifically, a 1% increase in exchange rate will result in an 86% increase in stock return in the short run. The p-value for this coefficient is 0.0000, which means that the relationship between exchange rate and stock return is statistically significant. This implies that the observed effect is unlikely to have occurred by chance, but rather is likely to be

a true reflection of the relationship between exchange rate and stock return. In the long run, the coefficient of the exchange rate is negative at -0.674891 with a p-value of 0.0111 , which is also statistically significant. This means that in the long run, there is a negative relationship between exchange rate and stock return. Specifically, a 1% increase in exchange rate will result in a 67% decrease in stock return in the long run. The finding that the long-run effect is negative may suggest that while there is a short-run boost in stock return due to an increase in exchange rate, the positive effect diminishes over time, leading to a negative relationship between the two variables in the long run. So, the study has found enough evidence to reject the null hypothesis that stated that show that exchange rate has no significant effect on stock returns in Nigeria.

The statement refers to Table 3, which provides information on the relationship between foreign direct investment (FDI) and stock returns. The coefficients presented in the table reveal that FDI has a significant impact on stock returns, both in the short and long term. Specifically, the coefficient of -0.001825 in the short term suggests that a 1% increase in FDI will lead to a 1% decrease in stock returns, which indicates a negative relationship between FDI and short-term stock returns. In the long term, the positive coefficient of 0.002548 and a significant p-value of 0.0286 implies that a 1% increase in FDI will lead to a 1% increase in stock returns. The fact that the long-term effect is statistically significant and has a large impact on stock returns is significant, as it suggests that FDI can be an important factor in driving long-term stock market performance. Overall, the results of the study provide statistical evidence to reject the null hypothesis and suggest that FDI has a meaningful impact on stock returns, both in the short and long term.

The statement refers to the analysis presented in Table 3, which examines the relationship between inflation rate and stock returns in Nigeria. The table presents the coefficients for the short-term and long-term impacts of inflation on stock returns. The short-term coefficient of -0.122710 indicates that a 1% increase in inflation rate is associated with a decrease of 1% in stock returns in Nigeria in the short term. However, this coefficient is not statistically significant, which means that the observed effect may have occurred by chance. Similarly, the long-term coefficient of -0.003531 also suggests a negative relationship between inflation rate and stock returns, but it is also not statistically significant. This means that the observed effect may not be meaningful and could be due to chance. Based on the results presented in Table 4.4, the study has enough evidence to reject the third null hypothesis, which suggests that inflation rate has no effect on stock returns in Nigeria. While there is a negative relationship between inflation rate and stock returns in both the short and

long term, the effects are not statistically significant. Overall, these findings suggest that inflation rate may not be a major factor influencing stock returns in Nigeria, at least not in a statistically significant way.

Post Estimation

The diagnostic test results presented demonstrated that the estimated models satisfied

Table 4
Ramsey RESET test

	Value	Df	Probability
t-statistic	2.091949	21	0.0488
F-statistic	4.376252	(1, 21)	0.0488
Likelihood ratio	6.435906	1	0.0112

Source: Author's Analysis (2023).

In order to determine if the model was well specified, Ramsey RESET Test was adopted to conduct linearity test on the model with null hypothesis that the model was linear. The null hypothesis could not be rejected at 5% level of significance. Thus, the linearity of the model was confirmed

Table 5
Co integration Test based on Johansen Multivariate Statistics

Hypothesized	Trace	0.05	
No. of CE(s)	Statistic	Critical Value	Prob.**
None *	53.38301	47.85613	0.0138
At most 1	19.45423	29.79707	0.4606
At most 2	7.969957	15.49471	0.4686
At most 3	0.041642	3.841466	0.8383

Hypothesized	Max-Eigen	0.05	
No. of CE(s)	Statistic	Critical Value	Prob.**
None *	33.92878	27.58434	0.0067

At most 1	11.48427	21.13162	0.5990
At most 2	7.928315	14.26460	0.3860
At most 3	0.041642	3.841466	0.8383

Source: Author's Analysis (2023).

The results of the tests indicate that the statistical hypothesis of no co-integration is rejected for $r = 0$, as evidenced by both the trace and Eigen tests at a significance level of 5%. In this particular scenario, it can be inferred that the system contains at least one co-integrating vector. The analysis reveals that the variable series exhibit stationary in the long term when subjected to linear combinations. Empirical evidence suggests that there exists a complex long-term equilibrium relationship between stock returns, exchange rates, foreign direct investment, and inflation rates.

Table 6
Error Correction Model Estimates

Variable	Coefficient.	Adjustment Coefficient
SR	-0.016670 (0.01284) [-1.29810]	
EXCR	-0.001583 (0.00123) [-1.28574]	
FDI	-0.053580 (0.08769) [-0.61099]	
IFR	-0.001572 (0.00165) [-0.95345]	

Source: Author's Analysis (2023).

Table 6 displays the outcomes of an Error Correction Model (ECM) estimation aimed at determining the short-run equilibrium relationship among the specified variables. The table presents the adjustment coefficient for each variable individually. The results obtained from the ECM analysis indicate. Negative coefficients indicate an inverse association between the independent variables (EXCR, FDI, and IFR) and the dependent variable.

5. CONCLUSION AND RECOMMENDATIONS

Conclusion

Based on the findings, it can be concluded that exchange rate is a determining factor of stock returns in Nigeria. The Nigerian stock market is heavily influenced by the exchange rate due to the country's dependence on crude oil exports, which are typically priced in US dollars. As such, any changes in the exchange rate can have a significant impact on the profitability of Nigerian companies and their stock prices. The study also concludes that foreign direct investment (FDI) is a factor affecting stock returns in Nigeria. There are several reasons to support this conclusion. First, foreign investment inflows have been found to have a significant positive impact on the performance of the Nigerian stock market. This suggests that FDI plays a key role in determining stock returns in the country. Second, foreign investors are major players in the Nigerian stock market, and their investment decisions can have a significant impact on the performance of the market. The presence of foreign investors in the market can increase liquidity and reduce volatility, which can help boost stock returns. Based on the findings of this study, the following recommendations are proffered:

Recommendations

- i. The Central Bank of Nigeria should continue to implement sound monetary policies that help to stabilize the naira. This will help to reduce volatility in the exchange rate and increase investor confidence, which in turn increases stock returns.
- ii. The Nigerian government should take steps to encourage foreign investors to invest in the Nigerian stock market. This could include offering tax incentives or other benefits to foreign investors, improving the ease of doing business in Nigeria, and increasing transparency and regulation of the stock market.
- iii. The Central Bank of Nigeria should take a more active role in implementing monetary policies aimed at controlling inflation. This could include adjusting interest rates, increasing reserve requirements, and regulating the money supply to prevent excess liquidity.

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